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Good Silage from Bunker Silos



N-25633 - Level each load of forage and pack thoroughly as it is placed in the silo. A tight pack forces air out of the stack and reduces opportunity for development of oxygen-consuming bacteria, which cause silage to spoil.

Farmers can put up good silage in low cost horizontal or bunker type silos by tight packing and prompt covering to seal out air and water, according to studies made by the U. S. Department of Agriculture.

With best materials and handling, USDA dairy husbandman C. H. Gordon and agricultural engineer J. R. McCalmont found that silage losses could be kept as low in horizontal silos as they could through equally good packing and sealing techniques in upright silos. The findings are based on experiments carried out at the Agricultural Research Center, Beltsville.

Horizontal surface or bunker type silos are gaining popularity with farmers because of their lower first cost and ease of filling. The bunker type silo also has the advantage of being easily adapted for self-feeding of cattle, thus saving time and labor of feeding silage. However, the excessive spoilage and low

quality of the silage obtained has been a problem with this type of silo.

The researchers say that the trouble is caused by inadequate packing and covering. They found that tight plastic covers of either black polyethylene, vinyl, or neoprene-coated nylon can provide an airtight seal over the silage, and can greatly reduce surface spoilage. Maintaining a firm weight over the entire silage cover is a necessary part of good covering technique. The weight prevents air movement under the plastic when the cover is punctured or opened for feeding.

The pictures on this and the next page show how to pack and cover a bunker silo using plastic cover. Although chopped grass silage is shown in these pictures, the same techniques apply to putting up corn or sorghum.

Magazines and newspapers may obtain glossy prints of any of these photographs from the Photography Division, Office of Information, U. S. Department of Agriculture, Washington 25, D. C. Others may purchase prints, at \$1.00 each, from the same address.



N - 25628 - Pack silage by running a tractor back and forth during entire filling operation. Continue packing with tractor about half hour in the evening after the last load. Then pack in the morning for about half hour before first load.



N - 25638 - Cover silage as soon as the last load is packed. Use material that is air and water tight. When properly used, polyethylene and vinyl plastic films and neoprene-coated nylon fabric covers have been found effective by USDA specialists.



N - 25642 - Weight cover at the edges and ends with moist sawdust or similar weighting material to make a tight seal.



N - 25646 - Spread a 2 to 3 - inch layer of weighting material over the entire cover. Weight prevents air movement and distribution under the cover when it is rolled back for feeding, and confines spoilage to small area. Weight also prevents air from entering at possible punctures in the cover.

N = 27072 - An investment in tight covers and good packing procedures for horizontal silos will bring a high return in silage saved.

